Memoranda

YELLOW STONE

JUNE 1980

Dora G. Kluman
National Zool. Park
Washington DC
20008

Country Round-up
N. College Ave
@ 5 lights on
right.

Washington
1 block South
from Country Round-
Up
@ 1 block
West College
La Porte Ave.

2

nd

nati

man

k

d

5-6 June 80 -
Minnesota Zoo

Sandy Friedman - bat weasel
John Lewis clouded leopards

~~Sandy needs name of bat band mfg. or necklaces -~~

John Tobias: keeper Denver Cincinnati
knows kit fox breeder woman
~~Wants white tipped deer photograph.~~

Nick Reindl - Northern Trek
Ron Johnson - Tropica - bird
Austin McVitie
Marine Mammals

Discussions with
Meech + Seal June 6, '80

Been to India 2-3 x
Immobilization +
radiotracking. Mainly
thru Project Tiger.
Hope to develop training
program through Kanha.

P. Tiger made all arrange-
ments for customs. Didn't
act.
Will go in January —
to Khana. Have been thru
mainly northern parks
including Gir (imm. lion)
Corbett, Khana.
All immobilizations

done via baiting. All
Tiger Parks are baiting.

Johnsingh visit Mech
Dec? Sept? January?

ABS

William Andelt: Col. State Univ
coyote/Texas (Lehner student)
thick brush, thorny
diet: rodents, rabbits, fruit in
summer: some deer in
winter: no dens:
group size not dependent
on carcass defense –
Thinks pop ≅ saturated
2-4 coy/sq mi.

Johnsingh → Texas: Dec
Andelt in Texas in Dec.

Steve Stringham
Tennessee

Andrew Smith
U. Arizona Tempe
radios on kit foxes + coyotes
Johnsburgh

Ollie Moore
self grooming +
eyac in ♂ rats
reference.

Kovach + Klemf

Marc Bekoff
U. Colorado
Johnson Hall

Send L. Wasser
Conserv. Biol article
Sex differences in
social inhibition

Send Beck
Callitriched book

Leah Gavish
Dept EEE B
Urbana 61801
M. ochrogaster monogamy

Martha McClintock
suppression
Conserv. Biol.
Sex differences
Am. Nat.

Holly Dublin
Biol. AR-10
Univ Wash.
Seattle 98195
Send
♀ suppression
papers.

NORTH AMERICAN WILDLIFE CENTER, INC.

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A Sanctuary for injured, orphaned and abandoned wildlife.

Allee Comm
Harlman, Barry Gilbert
Celia Moore
Ron Minkowski

Clayton M Hodges
winner of Allee Award

Dick Knight
been urine
to measure
catecholamine levels.

14 June 1980

Heidenreicher ranch

(a) group of 10 ♀ + calf
pronghorn
Also (b) single ♂
(c) 2 ♂♂
(d) group of 6 with
some ♂♂

Pronghorn on "bench"
between mountain +
before valley,
mainly sagebrush
+ rabbitbrush, dry

Also saw great blue herons
Apparently old rookery
nearby on the ranch

on ridge
marmota flaviventris
ground squirrels in
valley (Citellus richardsoni)
single
white tailed deer
elk droppings

Kingfisher
red wing blackbird
yellow headed blackbird
turtle dove
snipe sparrow hawk
all on fence posts
along road
striped
dead skunk on road

15 June 1980

@ 4:30 - 7:30 Drive
from Dillon Montana to
West yellowstone
via Ennis + Lake
Henry.
Cloudy + cool with
frequent rain.
After Virginia City &
Ennis, habitat
sagebrush bench;
the bench ~~slopes~~ tabling &
then sloping sharply
down. Benches are
from receded lakes,
(glacier lakes?)
Madison River running
through

Saw several groups
of pronghorn
single males 2-3 x,
One group of @ 15
" " " @ 4
" " " @ 3
They were in cattle
pasture land altho only
one ♂ in pasture close
to cattle.
Single mule deer seen.
Some dead striped skunks
on road.

After entering National
Forest @ 10 miles
before West Yellowstone
saw ~~[illegible]~~ moose cow
with two young calves
near stream in trees.
One calf nursing, the
other laying underneath.
(@ 1915 hrs).
Moose near river.
Met with Dick Knight +
2nd NPS person (from DC)
Knight based out of
Denver but lives in Bozeman
Budget $200,000/year
including part-time
summer help, flying
time etc.

Have had radios on a
total of 55 bears since

1973, Currently 22
with transmitters.
Concentration over past
few years on habitat
quality, bear movements,
distribution.
Estimates 350 bears in
Park or 1/20 mi^2.
Food highly variable.
Elk carrion in spring
(since 79-80 mild winter,
little elk carrion ∴
bears not in good shape)

~1 mauling/yr. Bears
no longer being moved.
All dumps closed
between 73-79.

Bear management dealt
with Tri-Bear steering
committee with reps from
NPS, FWS, Fish & Game Dept
of Montana, Idaho, Wyoming.

Had beer with Dave & Alex:
Bear biology:
sex ratio heavily biassed towards
♂♂ in cubs - seems to have
been same even since Craighead.
Altho adult sex ratio more
even or biassed to ♀♀.
Interesting relationship
between red squirrel
pine cone caches & bears
stealing cone caches
at Yellowstone,

but not at Glacier.
Bears able to find caches
under 4ft snow.

Ranges of males up to
1000 sq mi.
Females to several hundred
sq. miles.
Young up to 5 years
moving huge distances.
♀♀ breeding first
at 5½ - 6½ years.
Later age than during
Cranbrook period.

♂♂ begins breeding
at 4½ yrs.

♀♀ with single cubs
wean them
as yearlings i.e. 15 mos.
Or if cubs large,
weaned as yearlings,
Otherwise, cubs
weaned as two-year olds
i.e. 27 mos.
Rut in May June;
birth Jan - Feb.

16 June 70

M99 - dart gun - 1½cc.

Ketaset can be used on bear up to 140 lb. 7cc.

M50/50 antidote with M99

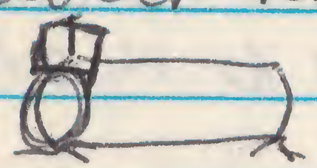
Had been using Sernylan prev.

Telonics receiver with scanner -

Can load frequencies and have receiver scan at different frequencies! Usually run 3 frequencies, eg 4399, 4400, 4401 if freq. is 4400.

16 June 1980

Out at 0630 hrs. @ 10 mi out of park. Knight had set two culvert traps with veggie, ponies, etc.



One young ♂ caught #55 – Trapped as yearling Autumn '79 @ 170 lbs, good weight.

Transmitter put on previous week, but had been taken off by bear. New transmitter put on.

All bears ear tagged, that are trapped. Many lose transmitters when they try to retrieve.

Wolves: Stouffer Prodnr been pushing for wolf reintrod., willing to finance @ $50,000. Stouffer known to harass animals in parks for photos. NPS holding off.

People around at breakfast:

Mary (Meghers Marr) – bison research Chief research biologist for Yellowstone Park

Doug Huston – researcher on elk, currently writing up in Corvallis (not around)

Roland Wauer: Science administrator NPS based DC

originally at Santa Fe office but detailed to D.C.
Some ornithological training.

Wayne ~~Hamilton~~ Hamilton - physical sciences; on Yellowstone staff.

After catching, immobilizing 170 lb young bear #55, back to airport.

Saw black bear on way.

At airport sat with Mary Meghers + Warren Hamilton while each of us went up into airplane (2 seater) with Dave Stradley who pilots for them.

In plane, have receiver with Yagi antennae on each wing and a mobile Yagi directional antenna under the plane.

I flew over Hegben Lake and towards ridges where morning catch

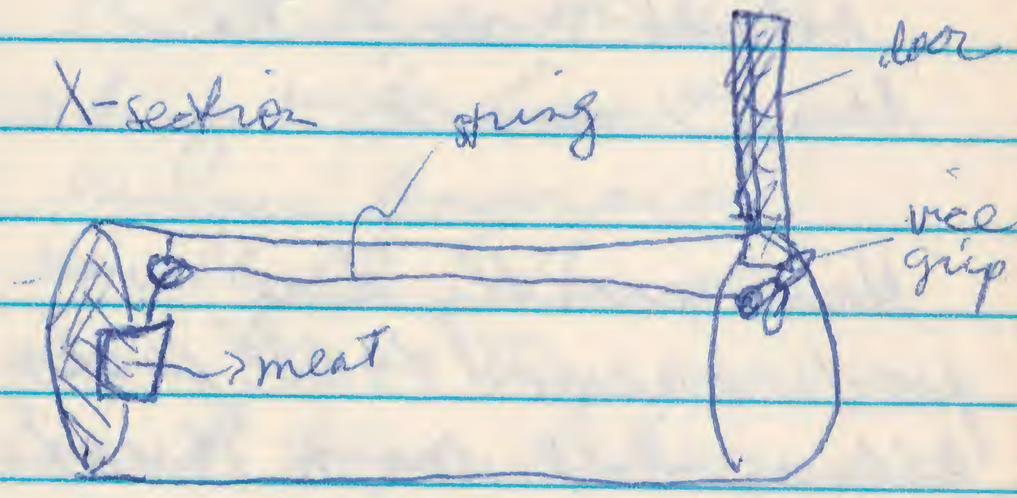
was holed up.
♂ 55 was seen there by Redonatcher with ♂ + ♀ sibs.
Mother #38 over two ridges.
On plane saw 2 trumpeter swans + 3 elk in clearing.

Habitat pure lodgepole pine.

Later went to city trash behind food stores to collect bait, mainly meat, fruit & veg.

Cantaloupe + strawberries preferred but cherries, beef, pork, grapes included.

Culvert traps sprung with vice grip attached to string or wire.



culvert trap
99" long x 25" high

Discussions during & after dinner:

NPS Research budget
1½% NPS budget,
119 in science area,
probably <30
actual scientists
doing research

Have recently done questionnaire to all parks, asking what major threats are.
Response being published by NPS & is being widely publicized.

NPS hopes to increase research budget, based on report.

Knight has been running grizzly study since 1973, has had @ 3 MS degree students working under him & summer temporaries, usually 8. This year only 4. They go around to where bears are radiolocated from the air and try to determine what the bears were doing. Also look at habitat type to see

if there is any preference.
for certain habitats,
to collect seats
for analysis, etc.

Dave Desoto
Philly

17 June 1980

Went out to bear traps.
[illegible] bear,
[illegible] 07.
[illegible] photos
[illegible] 13/4cc 1999

[illegible] breakfast.

[illegible] Stradley
[illegible] are in,
[illegible] lying
[illegible] 0900,

After breakfast, we head

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if there is any preference.
for certain habitats,
to collect scats
for analysis, etc.

Dave Desoto
Philly

17 June 1980

Went out to bear traps.
Caught a black bear,
@ 180-200 lbs, ♂.
Immobilized for photos
and released. 1¾cc M99

Back to airport for breakfast.
With Dick, Roland;
Summer asst. Mike,
Later ~~[illegible]~~ Dave Stradley
+ Dave, asst. come in.
They had been flying
~~to~~ from 0530 – 0900,
radioing bears.

After breakfast, we head

for Madison River
bridge where we
hike over ridge into
meadow to look
for bear sign, @ 2 mi walk.
Several unidentified
bears had been sighted
on a Sunday a week ago
(1½ weeks ago) and
Marilyn Wood + Dave,
summer temp. asst.
had been told to go in to
do a vegetation analysis,
and look for bear sign.
It's a beautiful
meadow + a warm day,
@ 80°F in sun.
We find elk calf
femur + hoof,
recently killed. Blood
in marrow is red.
Lots of coyote, elk,
buffalo scats.

Two beds which may be
old bear day beds.

We see two elk stags
on the ridge edge
across from the lodgepole
before we leave.

We leave and drive to
Old Faithful Inn to
see the geyser, have a
drink.
We see lots of

elk on the way,
grazing in the meadows.
Also a herd of bison.
No bison calves seen,
but one elk calf.
Ground squirrels around.
Elk stags in velvet +
apparently ♀♀ are just
giving birth.
Also most bison have
calved.

Had drinks + returned
seeing more elk +
bison.

Veg: Pine part beetle
been killing off
lodgepole pine;
they go reddish +
there have been many
tree falls. In some
areas 50% trees
down.

18 June 80

Drive to Mammoth, Tower Falls, Grand Canyon of Yellowstone during course of day.

Through Roosevelt lodge.

Did veg. analysis at area near Blacktail deer Creek (near M. Meagher cabin) where 3 bears had been seen, 6 days ago. There were unidentified bears. The hike was @ 3 mi in.

We ended up in

an ~~meadow~~ area of rolling hills with meadow interspersed with lodgepole pine stands. One stand showed heavy evidence of bear use. Lots of scats found as well as claw marks on logs from grub foraging. Many of the trees ~~to~~ had ~~[illegible]~~ bark torn off with dozens bandates.

According to Dave much ~~[illegible]~~ of that tree damage was due to porcupines

saw woodpecker + Spermophilus in lodgepole. Dave saw 3 pronghorn along ridge.

Moved to area where collared black bear had been radiolocated, in a creek bed which led ~~to~~ eventually to M. Meagher cabin. Moose sighted in the area, but no bear sign seen.

Total day's walk @ 7 mi.

During drive around
moose, mule deer,
elk seen — No
bison.

200 mi
South

19 June 80

Went to trapping
site. Large 300 lb
♂ #35 in trap.
Last spring had been
as far as Jackson
Hole. Had a radiocollar
on for @ a year

Given 230 mg Sernylan
230 mg
Acepromazine
100 mg/100 lbs.

2.3 ml (100 mg/ml)

Placing new collar on
bear.

1st injection @ 0950 hrs

Bear not down
after 50 min.
Given minimum dose
supplemental
1.9 ml Sernylan
1.9 " Acepromazine

= 190 mg.

@ 11:15 bear down but
still blinking

Given 0.5 ml
supplemental with
hand held syringe.

When pulled out
collar tight, hair
loss around neck.

1st dart hadn't hit
or released any drug.

At 11:45 given
0.25 ml supplemental
since still blinking
+ under very
lightly.

New
a Collar put on over
head + loose enough
for both hands
to go under
the collar flat.

Bear stayed down
till 5PM -

After bear immobilizatn.
went to check bear
radiolocation site
(0749). "Duck creek"
Immediately found 2 day
beds, one with part
of elk fawn right
next to it
lodgepole pine + bitterbrush.
Found dead beaver near
creek and beaver
dam was in disrepair.

20 June 1980 -
Drove → Old Faithful →
Lake from West
Yellowstone.

Elk, mule deer, a few
bison seen.

no cow-calf herds
seen.

Drove W. Yellowstone →
Dillon

Tell Kodak that
film taken at
ASA 200 instead of
ASA 400

#6 Cont.

#16-19 Bull bison
20 June 1980.

#5 (cont) 18 June 80
18-22 Yearling ♂ moose
23-36 Least chipmunk?
Tower Falls Hairy woodpecker
G.C. Yellowstone
Skyline moose
mule deer

#6 Ektar 400 19 June 1980
#1-12 bear immobil.
ASA at 200.
19 June 1980
13-15 ASA at 400

#4 Kodachr. 64

17 June 80
Black bear immobil.
#1-9

10-36
17 June 80 Elk, bison,
meadow looking for
bear sign
Old Faithful
ground squirrel

#5 Ekta 200
17 June 1980
#1-8 Bison + elk
towards dusk

18 June
9-14 Elk bulls
in velvet

#2 Kodachr. 64
16 June 80 -
Yellowstone
#1-36
Grizzly immobilization
calvert traps

#3 Kodachrome 64
16 June 80
At Yellowstone
Airport:
Collecting garbage
for bait
#1-9
#10-19 Baiting culvert
traps
17 June 80
20-36 Black bear
immobil.

#4

Film

#1 Ekta 64

#1-12 Minnesota Zoo

5-6 June 1980

#13-21 Seidenstecker

ranch

13 June 1980

Table mountain

#5

22-36 16 June 80

Yellowstone

Bear traps etc.

$183.00 ABS

25. dinners in Fort Collins
$12 ~~—~~ steak
$6 armadillo
$7 sandwich

→ Dillon.

→ W. Yellowstone

$18
× 5 room
$90

12 bkf. $3.00 + $3.00 + $1.20
dinner $11 + $5

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